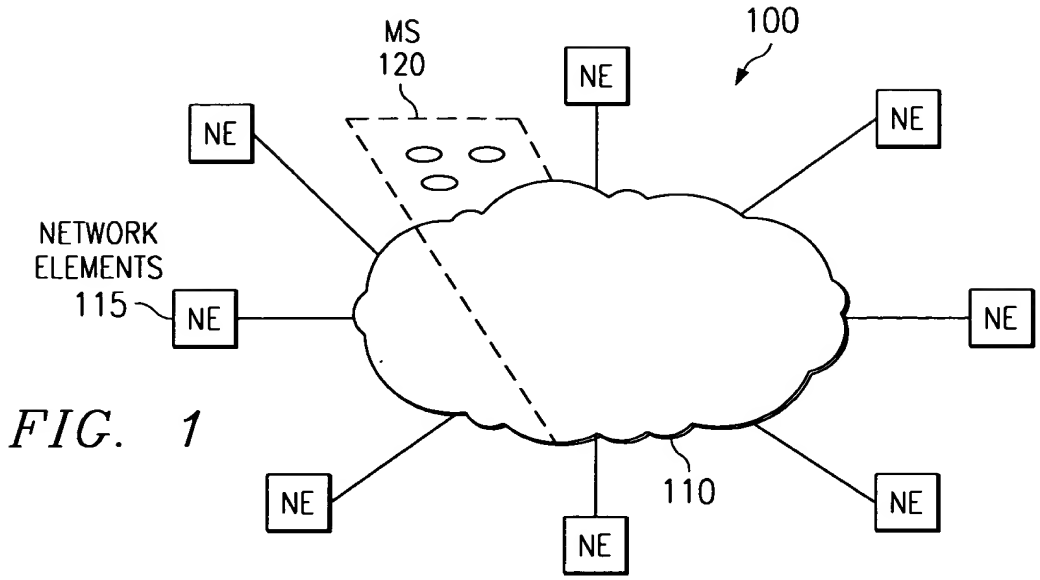

FIG. 1

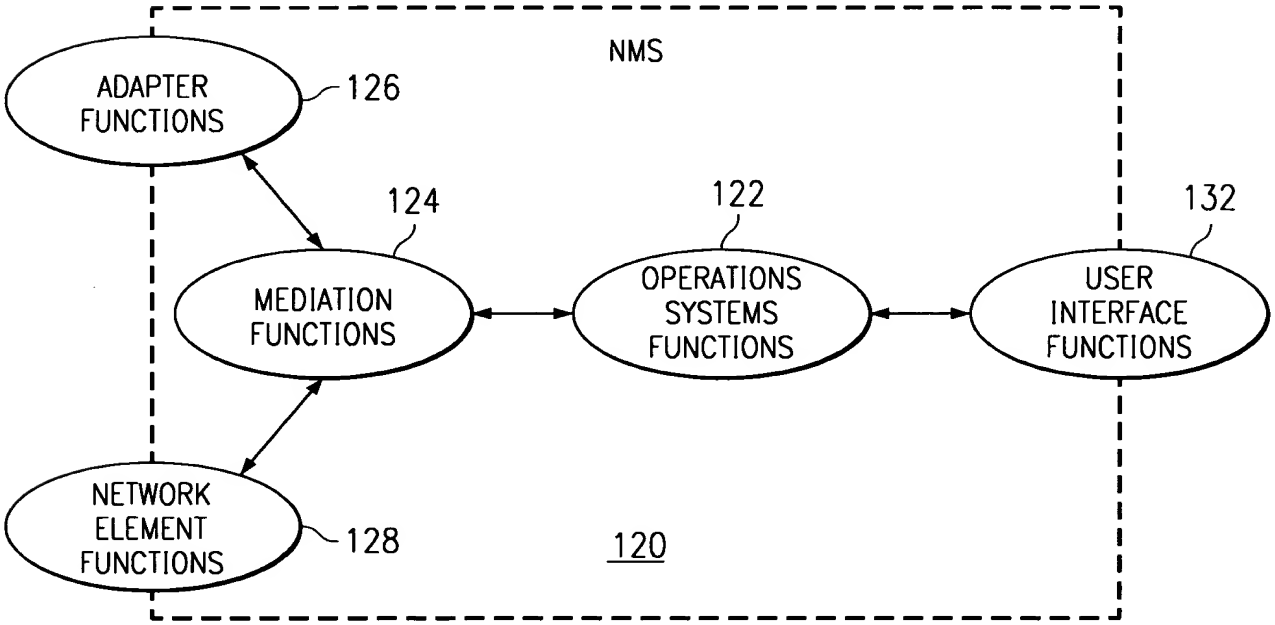

FIG. 2

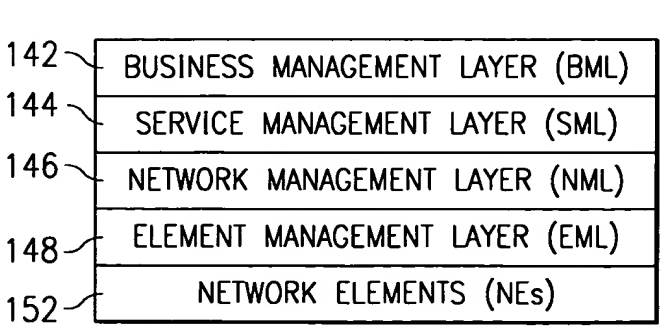

FIG. 3A

0005.0F-05120458

000601 09120260

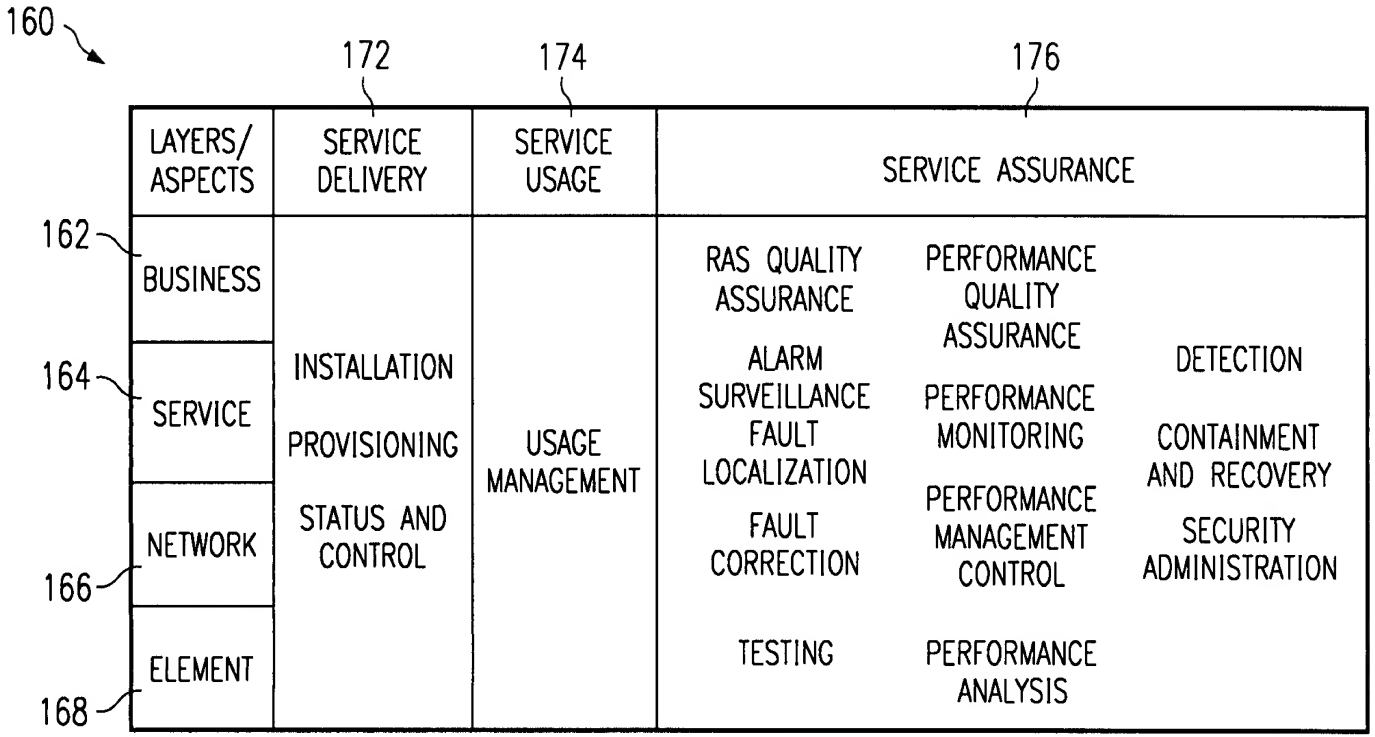

FIG. 3B

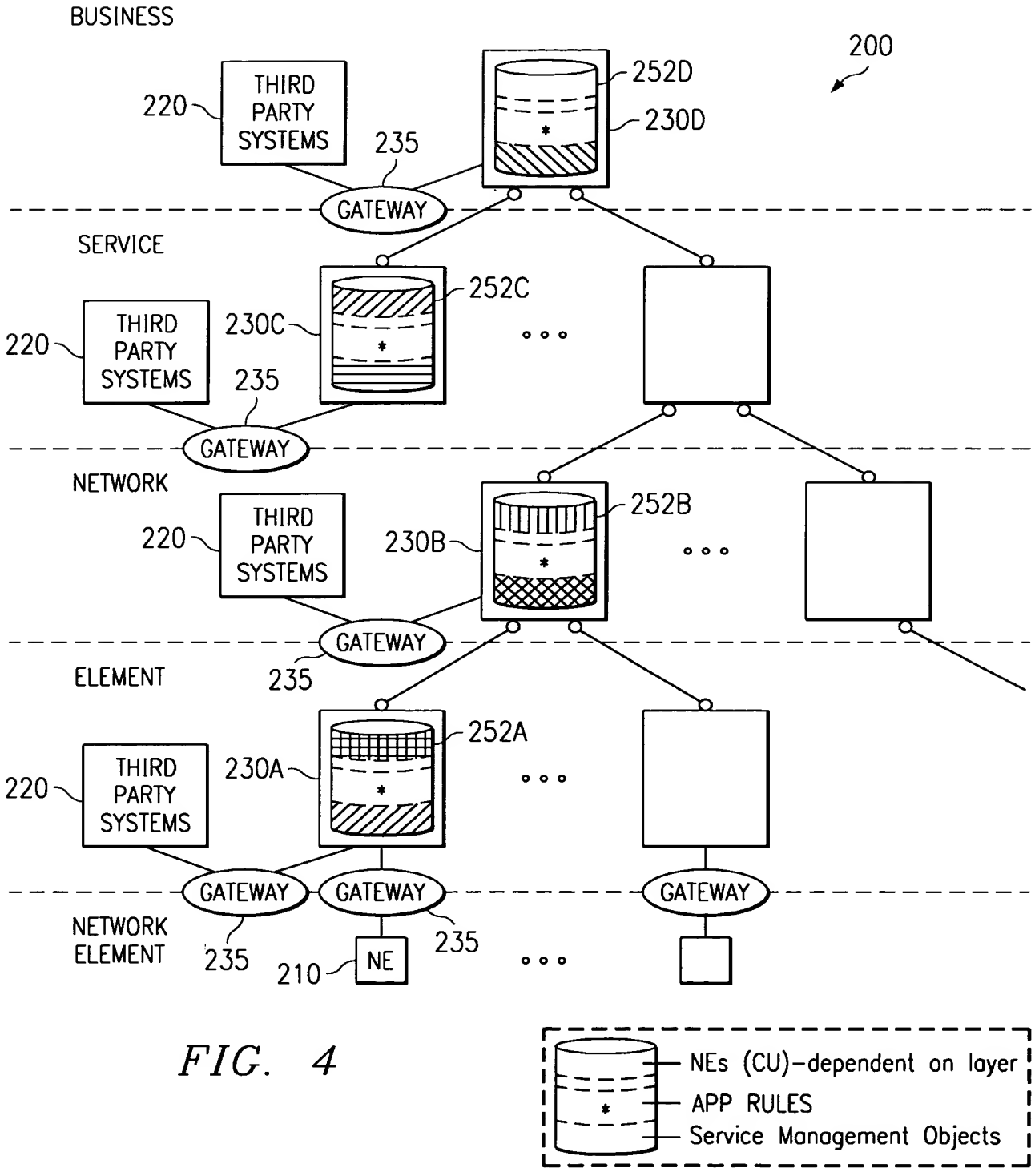
BUSINESS
200
220
THIRD PARTY SYSTEMS
235
GATEWAY
252D
230D
SERVICE
220
THIRD PARTY SYSTEMS
230C
252C
235
GATEWAY
NETWORK
220
THIRD PARTY SYSTEMS
230B
252B
GATEWAY
ELEMENT
235
220
THIRD PARTY SYSTEMS
230A
252A
GATEWAY
GATEWAY
GATEWAY
NETWORK ELEMENT
235
210
NE
235
NEs (CU)-dependent on layer
APP RULES
Service Management Objects

FIG. 4

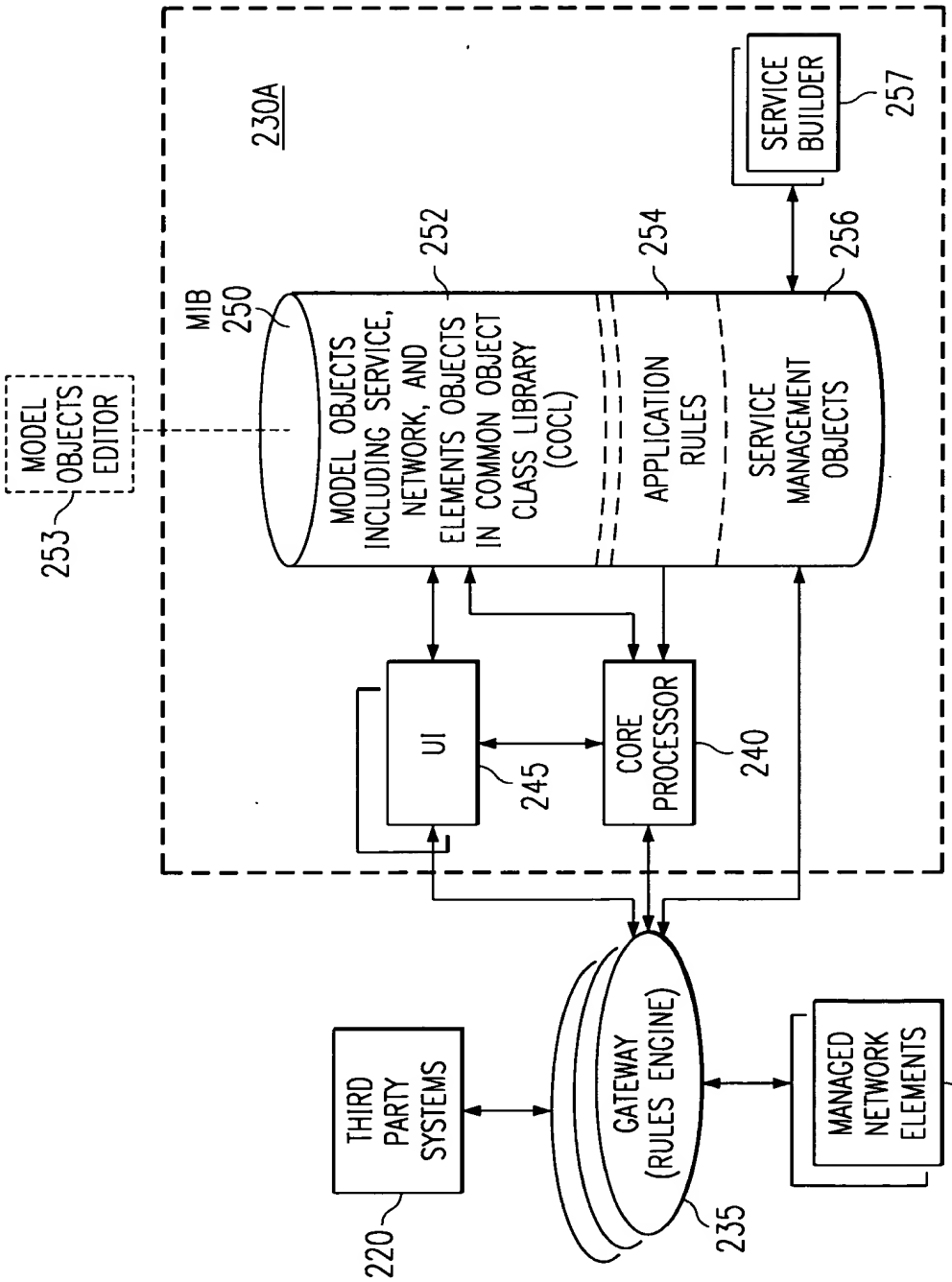
230A
MIB
250
252
254
256
257
MODEL OBJECTS INCLUDING SERVICE, NETWORK, AND ELEMENTS OBJECTS IN COMMON OBJECT CLASS LIBRARY (COCL)
APPLICATION RULES
SERVICE MANAGEMENT OBJECTS
SERVICE BUILDER
MODEL OBJECTS EDITOR
253
UI
245
CORE PROCESSOR
240
GATEWAY (RULES ENGINE)
235
THIRD PARTY SYSTEMS
220
MANAGED NETWORK ELEMENTS
210

FIG. 5A

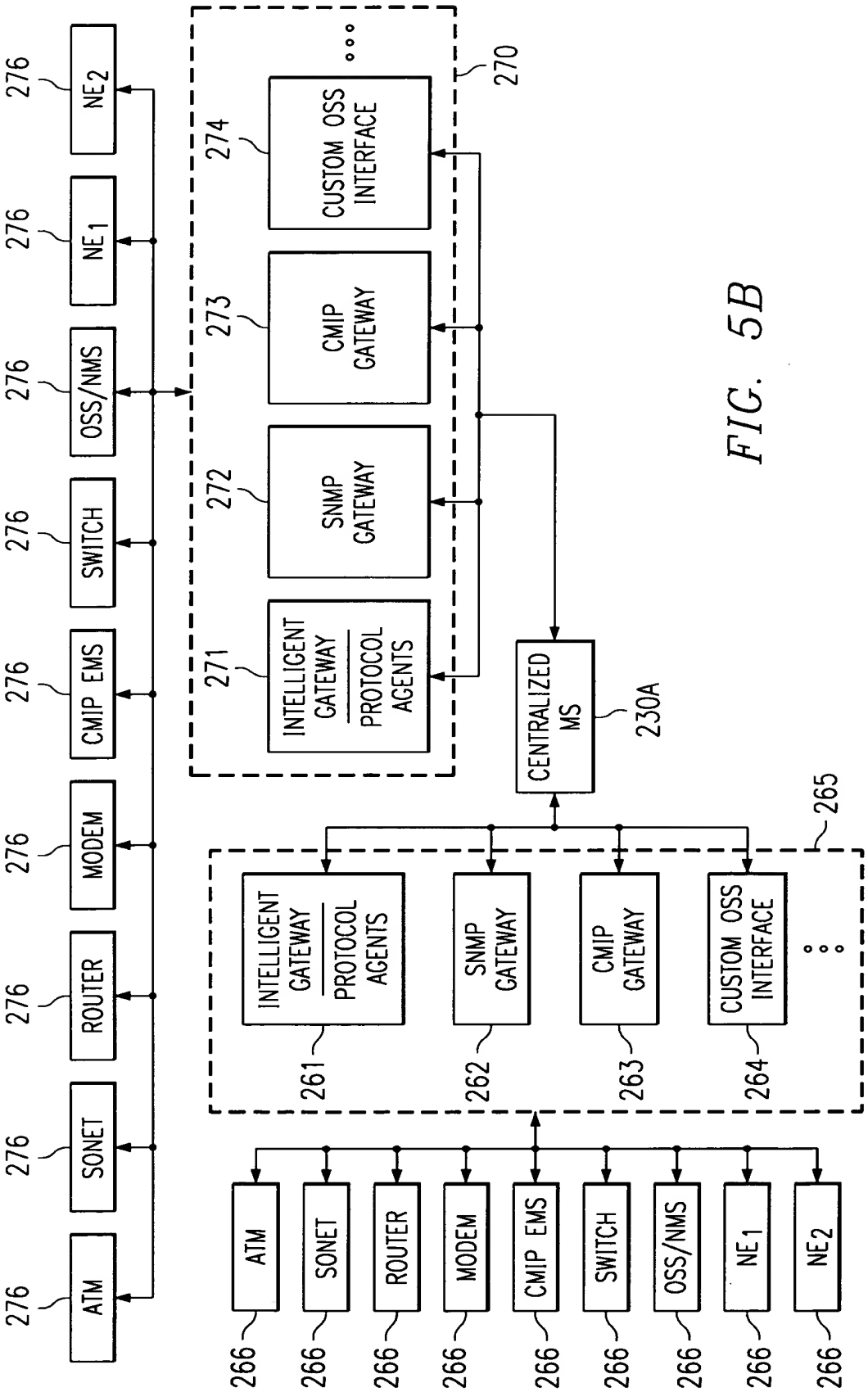
276
ATM
SONET
ROUTER
MODEM
CMIP EMS
SWITCH
OSS/NMS
NE1
NE2
270
271
INTELLIGENT GATEWAY / PROTOCOL AGENTS
272
SNMP GATEWAY
273
CMIP GATEWAY
274
CUSTOM OSS INTERFACE
CENTRALIZED MS
230A
265
261
262
263
264
266

FIG. 5B

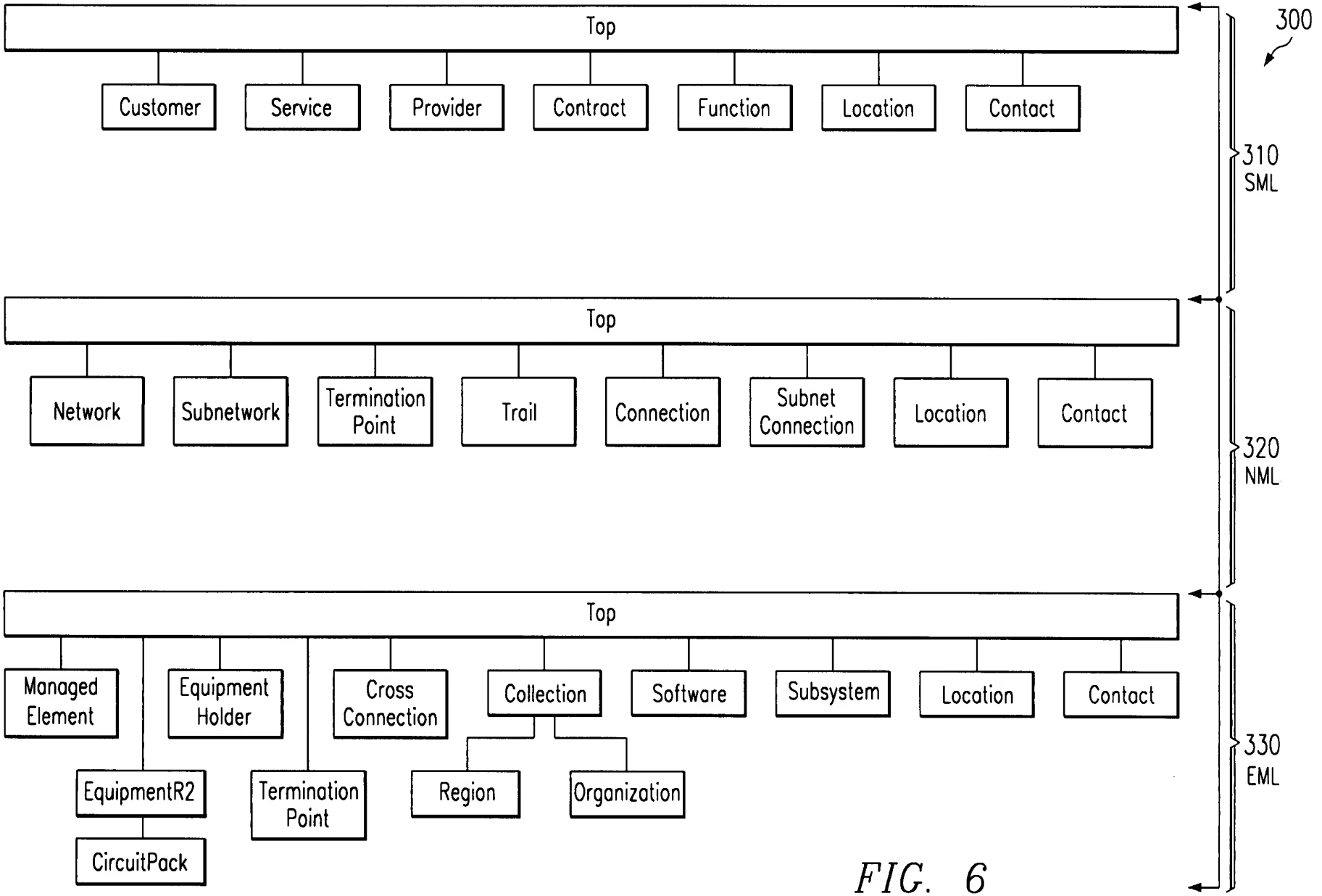
300
Top
Customer
Service
Provider
Contract
Function
Location
Contact
310
SML
Top
Network
Subnetwork
Termination Point
Trail
Connection
Subnet Connection
Location
Contact
320
NML
Top
Managed Element
Equipment Holder
Cross Connection
Collection
Software
Subsystem
Location
Contact
EquipmentR2
CircuitPack
Termination Point
Region
Organization
330
EML

FIG. 6

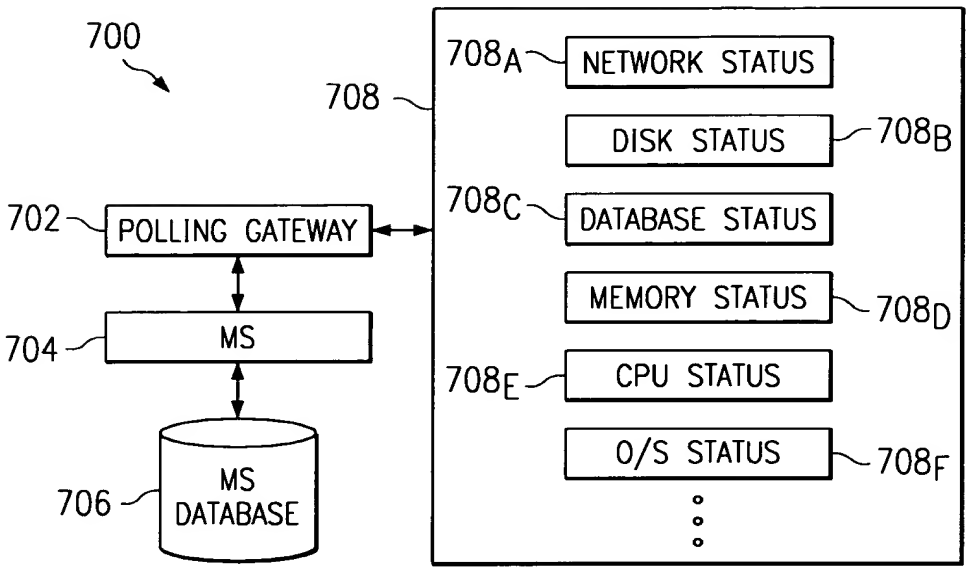

FIG. 7

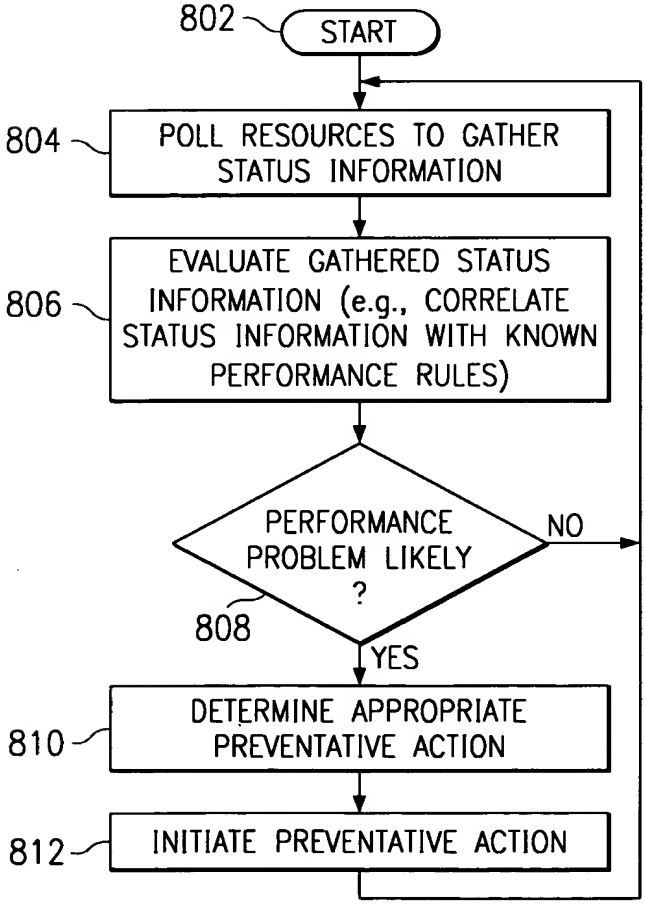

FIG. 8

09/750,360 - 12/26/2003

Name:. Resource	
Type: Class	
Attribute(s): Type	
StartMon	(String)
LastMon	(String)
MinFaults	(Real)
IntFaults	(Real)
MajFaults	(Real)

FIG. 9

Name: ResourceMgr
Class Resource
Type: Managed Object Manager

FIG. 10

Name: SYSR	
Type: Resource	
Managed By: ResourceMgr	
Attribute(s): Type	
StartMon	(String)
LastMon	(String)
MinFaults	(Real)
IntFaults	(Real)
MajFaults	(Real)
Runqi	(Real)
Runqb	(Real)
Runqw	(Real)
Contxt	(Real)
MPin	(Real)
MPout	(Real)
MemRe	(Real)
Swapa	(Real)
CPU_Failure_Est	(Real)
Mem_Failure_Est	(Real)
Sys_Failure_Est	(Real)

FIG. 11

Name: SYSD	
Type: Resource	
Managed By: ResourceMgr	
Attribute(s): Type	
StartMon	(String)
LastMon	(String)
MinFaults	(Real)
IntFaults	(Real)
MajFaults	(Real)
DiskW	(Real)
Disk_Failure_Est	(Real)

FIG. 12

Name: NETR	
Type: Resource	
Managed By: ResourceMgr	
Attribute(s): Type	
StartMon	(String)
LastMon	(String)
MinorFaults	(Real)
IntermediateFaults	(Real)
MajorFaults	(Real)
IP	(Integer32)
OP	(Integer32)
IE	(Integer32)
OE	(Integer32)
Coll	(Integer32)
Defer	(Integer32)
IPID	(Integer32)
IPOD	(Integer32)

FIG. 13

09/02/2004, 10:36:00